International Journal of Industrial Engineering & Technology (IJIET) ISSN(P): 2277-4769; ISSN(E): 2278-9456 Vol. 5, Issue 2, Jun 2015, 17-28

TJPRC Pvt. Ltd.



# ON-LINE CULTURE AND CREATIVITY OF GRAPHIC ARTS AND ARCHITECTURAL DESIGNING STUDENTS IN CENTRAL MINDANAO, PHILIPPINES

#### MILDRED F. ACCAD

Sultan Kudarat State University, Philippines

# **ABSTRACT**

Internet connectivity and borderless education are two inseparable components of every educational institution. In terms of designing, international acceptance is always a battleground. Thus, this study aimed at determining on-line culture of students specifically on the leading portals and intensity of exposure that they in association with their competence in graphic arts and architectural designing. Descriptive and quasi-experimental methods of research were employed where graphic arts and architectural designing students were the respondent - participants. Study found out that social media is the most common portal accessible to them. They are more exposed to downloading movies than designing software. On-line game consume much of their time. Their references in graphic designing and architectural planning come from on-line movies and games. Respondents are generally average in creative designing, and, Facebook exposure is a significant predictor of students' performance in painting.

**KEYWORDS:** On-Line Exposure, On-Line Culture, Creative Design, Philippine Education

# INTRODUCTION

Internet studies found that the Philippines had an average peak internet connection speed of 32.6 megabits per second [Mbps] during the 4<sup>th</sup> quarter of 2013- one of the slowest in ASEAN [Malig, 2014]. Asian Internet Stats also reported that, internet usage statistics revealed too that 32.4% or 33,600,000 of the Philippine population are users according to Nielsen too. Philippines ranks 139<sup>th</sup> out of 185 countries or lags behind roughly two-thirds of the world's average Internet broadband download speed [Chiu, 2014]. Yet, connectivity and borderless education are two inseparable components that Philippine education institutions are working on very hard to become globally competitive. To address ASEAN 2016, institutions are conditioned to equip themselves for with the trend, particularly, on the on-line communication. In 2011, the United Nation recognized Internet access as a human right, thus, basic skills training modules should clarify the benefits of accessing on-line information and responsible information contribution, Chiu [2014] added. In terms of designing, international acceptance is always the battle since Filipinos are making strong contributions to other country's culture, arts, sports, fashion and design like in Qatar FilAmStar, [2012].Illustrators, designers and planners all over the whole world are moving business on-line if not blended modes. In the struggle of the Philippine educational system to keep abreast with the challenges of the time, despite the fact that financial constraints are always the reason for imbalanced laboratory facilities, they are forced to use other means to cope with the trend.

Sultan Kudarat State University is the lone government chartered University offering Architectural Drafting in Central Mindanao, Philippines. This curricular program according to the Commission on Higher Education [2014] belongs to those with lesser population of enrolees in the discipline of trades, humanities and townhouse planning in the entire country this comprises more or less 2,000 total enrolees in a year. However, SOCCSKARGEN region is one of the sources

of skilled manpower for local and international construction sector as computer-aided designers and drafters of commercial, industrial and residential house planning, aside from the arts/creative designing jobs like: illustrators, cartoonists, and graphic designers. Sultan Kudarat State University holds records in performances on visual arts competition in the national and international levels. Graduates from other institutions take their National Competency [NC-II] assessment in the said fields in SKSU.

On recent issues, on-line games, particularly DOTA have afflicted the young learners' attention, hence, the said game was banned in some cities of the National Capital Region of the Philippines. Likewise, Heng Keung Ma [2011] reported the relationship between internet addiction and anti-social behaviour of adolescents in Hongkong. However, there are two sides of the coin that would lead to the decision of either encouraging or prohibiting on-line exposure of students. This study aimed at determining the on-line culture of students specifically on the leading portals and the intensity of exposures, and, associates these with their competence in graphic arts and architectural designing. Some behavioural, academic related and time management aspects are also correlated with their on-line culture.

#### RESEARCH METHOD

Descriptive method and quasi-experimental research were employed where students enrolled in Graphic Arts and Architectural Designing courses are the respondents [86] and participants of the study [Gay, 2003]. Structured questionnaires were validated and administered to the respondents to measure their on-line culture including the contribution of on-line information into their individual skills in visual arts. To determine the level of creativity, their grades in the three courses were taken including competitions wherein they had to show their group creativity, but, rated independently. They were rated on the quality of participation or performance in a costume play competition similar to the idea of determining two to ten [10] participants according to Boyd, as cited by Groenewald [2004]. Mean percentage and multiple regressions were statistically employed with the aid of SPSS. Data are presented in pictorial, tabular and graphical presentations.

# RESULTS AND DISCUSSIONS

#### **On-Line Culture of Students**

On-line culture is refers to the most common on-line portals, nature and intensity of exposure and others attributes in internet experiences. Among the portals on-line, social media leads over games and movies. It was found out that Facebook is the social media which they commonly access on-line considering that 96% of the respondents have cellular phones besides, majority of the respondents-students are using Facebook, at least, twice a day using their cellular phones, lap tops and personal computers.

Twitter, flicker and Instagram are very seldom visited or they do not yet have accounts. In addition to Facebook, users are noted as the widest group of people on-line. This means that socialization is more functional to students than flickers which refer to groups of photographers or LinkedIn of professional groups. This finding confirms the report that the Philippines is the text capital of the world, but, has the slowest internet download average speed in ASEAN region [Chui, 2014].

**Table 1: Commonly Accessed On-Line Portals** 

On-Line Portals	Mean	Verbal Equivalent		
Facebook	2.02	At least twice a day		
Yahoo	0.55	Once a day or less		
Tweeter	0.25	Once a day or less		
Flicker	0.23	Once a day or less		
Instagram	0.25	Once a day or less		
Mean	0.66	Once a day or less		

Internet and telecommunications in the Philippines reported that, according to the group of researchers hooked in UAI, in 2004, there were 1,925,649 internet users Philippines belonging to the A, B, C classes, with ages ranging from 13 to 30 years old in Metro Manila, Philippines. Similarly, Angelou and Economides [2010] concluded that, in order to compete globally, schools must maximize their investments by carefully choosing real options since current trends in research have a lot of investment requirements, assumptions and risks, and, this exposure to on-line causes students to deviate from their real purpose of schooling.

The nature and intensity of on-line culture in terms of on-line reading is less evident among the learners, considering that they seldom read electronic references [0.73], research journals [0.64] and even stories [0.29], magazines [0.43] and, sometimes, they access on-line news and religious chain messages [0.73]. This finding can be associated with the accessibilities of news and religious chain messages, safety reminders and love quotes in their social media accounts and unintentionally viewing references for their curricular advancement on paid journals and e-books. This can be explained further that students in state universities and colleges in the Philippines are sons and daughters of meagre earner parents, not to mention those self- supporting students, as traced in the profile of the respondents where 25% of them are working students, 77% cannot access the internet facility of the school and 84% do not have internet connectivity in their respective homes. Their means of accessing information on-line, are only by way of free social media and other free downloadable applications. Internet and Telecommunications in the Philippines [2004] reported that 41% of the internet users are living in Metro Manila, Philippines, 17% are from Central Luzon, while the remaining 42% are a conglomeration of the remaining areas in the 16 regions of the country, to mention Mindanao islands. If on-line access is a human right according to the United Nations, as cited by the Chiu [2014], and the Philippines has around 2 Megabits per seconds [Mbps] compared to Hongkong with 68Mbps [Malig, 2014], thus, lagging behind internet access is a big issue to address. This conforms with the findings of the Asian Development Bank, [1999] that higher-education institutions with better sources of financing, or that can charge higher tuition fees, improve the outcomes in terms of employment of graduates and the pass- ratio in professional board examinations and other indicators of quality. This is one aspect of the diversity of higher education in the country. Thus, Republic Act No. 7722, otherwise known as the "Higher Education Act of 1994, creating the Commission on Higher Education to emphasize the Philippine Constitution's mandate of promoting and rendering quality education accessible to all Filipino citizens.

In terms of the nature or type of the applications and software, students are more exposed to downloading movies and/or playing on-line games which received the mean ratings of 1.32 and 1.04, respectively. This is described as once a day that they are doing and more than downloading design -related software. Downloading movies is just one of the antisocial behaviours of students [Heng Keung Ma 2011] as one form of internet addiction in Hongkong thus, confirming the statement of the Philippine Internet Usage Stat that the Philippines can reach 6.3 Million gamers during the rear 2008.

This is in consonance with the, findings that increasingly, strident criticisms have been directed toward the quality of university preparation programs for school leaders and the calibre of faculty staffing that these programs have [Griffiths, 1988; Heller, Conway & Jacobson, 1988; Murphy, 1993]. There is considerable sentiment that universities have been part of the problem rather than instigators of reform. It can also be noted that if students download movies and games at least once a day, an alarming issue must be addressed to remind students of their priorities.

Downloading foreign movies is the dominant culture on-line among respondent students. This is contrary to the notion that they are more engrossed in software related to designing buildings or advertisements. There are free downloadable software like sketch-up, movie-maker and V-ray, hence, almost all [85%] of those in the higher years hold such software compared to those in the lower years. Anyway, these downloadable software applications that aid in designing buildings, computer graphics and art - related endeavours are valid for 6 months, thus, there is no need to download them regularly. Nevertheless, after more than a decade of such efforts, Total Quality Mechanism has not yet established itself in the way many universities operate, especially, in matters related to classroom instruction. Thus, this is still one objective of every learning institution, keeping the traditional classrooms attuned to realities.

Games and movies are usually downloaded and viewed, at least, once a day. These consume much of their time. They tend to start viewing movies or playing games from 9:00 p.m. to 4:00 a.m. so they go to school late for the first session or altogether absent in the morning. This cycle is more common among third year and fourth year students and very selective among those in the lower years.

The attributes of on-line culture are that; majority of their references in graphic designing and architectural planning comes from on-line movies and games, particularly, cartoon character development. On-line viewing helps them conceptualizes interior and architectural designs. For commercial designs of advertisements in graphic designs, in particulars, on-line sources are also helpful to them. The ICT can be used effectively to improve the opportunities for connectedness of students, however, research has also shown that some teachers have a more significant impact on student achievement than others [McAffrey, Lockwood, Koretz, & Hamilton, 2004; Rivkin, Haushek, & Kain, 2005; Rockoff, 2004]. Teacher quality is seen as a key policy lever to narrow achievement gaps that exist along racial and economic lines.

#### **Creativity of Students**

Creativity and performance of respondents/participants are generally average with their grand mean of 2.03, where one [1] is the poorest and five [5] as the excellent rating in interior designing, commercial lettering, and, building planning and designing. Table 2 presents the general sources or references of students' undertakings when asked about the source of ideas, before rendering their concepts.

	· ·				
Indicators of Creativity	Mean	Verbal Equivalent	Interpretation		
Painting	3.39	Sometimes	41-60% is based from on-line sources		
Sketching	3.24	Sometimes	41-60% is based from on-line sources		
Building Planning	3.26	Sometimes	41-60% is based from on-line sources		
Interior Designing	3.26	Sometimes	41-60% is based from on-line sources		

**Table 2: Level of Online Sourcing for Creativity** 

Stage/set Decoration	3.33	Sometimes	41-60% is based from on-line sources		
Commercial Lettering	3.56	Almost all the time	61-80% is based from on-line sources		
Charcoal Portraits	3.22	Sometimes	41-60% is based from on-line sources 21-40% is based from on-line sources 21-40% is based from on-line sources		
Visual Art Competition	2.65	Seldom			
Tarpaulin Designing	2.48	Seldom			
T-shirt Printing	2.77	Sometimes	41-60% is based from on-line sources		
Grand Mean	3.12	Sometimes	41-60% is based from on-line sources		

In terms of creative design performance, their grades are good indicators of an average performance. This indicates that, almost all the time, in designing appropriate font styles, 61-80% of their concepts come from on-line sources. Seldom, or 21-40% of their concepts come from internet sources when it comes to visual art competitions and tarpaulin designing, while, 41-60% of their concepts in charcoal portraits, T-shirt printing, set or stage designing, painting, building planning and interior designing are drawn from viewed movies and movie clips on-line. In promoting originality, students were checked and warned about plagiarism, as indicated in the Intellectual Property Code of the Philippines [Republic Act No. 8293], thus, they seldom open or access the on-line sources because of its traceability during visual art competitions and tarpaulin printing. This is also stipulated by the Technical Skills Development Authority [TESDA] as government agency of the Philippines responsible for standardizing the training regulations in Visual Arts, Technical Drafting and Visual Graphics, to stress the value of intellectual honesty, originality and creativity. Moreover, the current trends in assessment reviewed by Ewell [1998] include shifting from standardized tests to performance-based assessments, from teaching-based models to learning-based models of student development, and from assessment as an add-on to more naturalistic approaches embedded in actual instructional delivery. Furthermore, there are a number of studies indicating that institutional self-evaluation processes taken as part of self-evaluation processes are very useful processes for higher education institutions [Saarinen, 1995; Thune, 1996; Smeby and Stensaker, 1999; Brennan and Shah, 2000]". Quality improvement can, indeed, have external origin. Moreover, Newton [2001] underlines another significant feature of policy implementation: the discretion exercised by 'front-line' workers, or 'street level' bureaucrats. [Lipsky, 1980; Prottas, 1978].

However, in Figure 1, the quasi-experiment showed that when given a chance to adopt, wear and play with costumes, the performance of students is more on foreign anime— influenced costumes and none had tried Filipino animated images.



Figure 1: The Performance of the Learners in Terms of Cosplay [Costume Play] Competition 2015

An outcome-based education is the basic reform of the century. This is to give real-world experiences while learning the crafts. It is alarming that Japanese anime' had really influenced the respondent-participants which are indications of hooking to on-line movies they have viewed. The nationalism of ABS-CBN network is shown where the artists have to imitate local artists not only foreigners in the newly franchised global entertainment segment titled: "Your Face Sounds Familiar" aired in 2015. This is one of the mechanisms which protects original Filipino creativity. His Excellency, Benigno Simeon C. Aquino, III, in his Executive Order No. 25 s.2012, of the Philippine Higher Education Roadmap, stressed higher education reform; it is gearing toward an outcome-based education similar with the sharings of Valisno [2000]

In similar studies, the students' performance is externally rated as Brennan and Shah [2000] stated that outside evaluators can operate at the subject level, generally embrace and reinforce disciplinary cultures. In several countries, studies have concluded that there is a trend towards greater centralization in higher education institutions—in procedures and in organizational decision-making as a consequence of external quality assurance activities [Askling, 1997, Stensaker, 1999; Stensaker 2003]. Closely related to the trend towards centralization is the tendency that HEI's have become more 'bureaucratic'. Stensaker [2003] refers to a study from Norway [Gornitzka et al., 1996] which shows "that university administration is changing its profile and functioning where simple tasks and positions are removed and replaced by administrators performing more complex and strategic tasks" as also remarked by Kogan et al., [2000].

However, where positive changes to the student learning experience have taken place, these are not necessarily directly attributable to the existence of a quality assurance system [Newton, 2000] and, it is argued, the existence of external quality arrangements provides, at the best, a legitimate move for internally-driven innovation [Harvey and Newton, 2004]. It is argued that other factors completely outweigh the impact of external quality monitoring on student learning. [Horsburgh, 1999; Harvey, 2002].

Another factor is ensuring the quality profile of the teacher workforce which is crucial in extending the democratic mission of public schooling to the unprecedented number of students who are more diverse than at any point in US history. Eschewing most ideologies in favor of empirical data, it argues, via evidence, that our longstanding but much-beleaguered public education system is still the best choice we have, Lubienski, C. A.& S. T. Lubienski. [2013]. Another is the idea of Gordon [2009] that one of the necessary skills for future leaders in any field is the 'technological mastery' and not being a graduate of public or private education institution. Likewise, Wang [2010] argues: when clear goals are set,

technology serves teaching and learning to its maximum level.

# **On-line Exposure and Creativity**

The prediction of on-line exposure towards the creativity of the learners is presented on Table 3.

Table 3: Level of On-Line Culture in Terms of Exposure and Student's Creativity

ANOVA	df	SS	MS	F	P-Value				
Regression	5	9.92	1.98	1.35	0.26				
Residual	50	73.44	1.47						
Total	55	83.36					Confidence Level		
					0.95		0.99		
	Coefficients	Standard Error	t Stat	P-Value	Lower 95%	Upper 95%	Lower 99%	Upper 99%	
Intercept	2.89	0.29	9.95	0.00	2.307303607	3.474659445	2.112827	3.669136	
FACEBOOK	0.26	0.13	2.10	0.04	0.010954514	0.519003435	-0.07368	0.603642	
YAHOO	-0.11	0.23	-0.47	0.64	0.580961783	0.359548363	-0.73765	0.516233	
TWEETER	-0.74	0.71	-1.03	0.31	2.174317034	0.695884597	-2.65248	1.174048	
FLICKER	1.14	0.86	1.32	0.19	0.587426519	2.862721438	-1.16221	3.437501	
INSTAGRAM	-0.20	0.37	-0.54	0.59	0.953964531	0.547382891	-1.20408	0.797501	

# y = 2.891 +0.265\*FACEBOOK -0.111\*YAHOO -0.739\*TWEETER +1.138\*FLICKER 0.203\*INSTAGRAM

Using standard multiple regression analysis to evaluate how the students' exposure to on-line portals predict their paintings skills, the linear combination of status is not significantly related to their painting creativity, F [5,50] = 1.35, p>.05, the multiple regression coefficient is .345 which indicates that approximately, 11.9% of the variance of the students' creativity can be accounted for the linear combination of students' on-line culture, particularly, exposure to Facebook, Yahoo, Twitter, Flicker and Instagram. The regression equation for predicting the students' creativity level = 2.891 + 0.265\* face book, -0.111\*Yahoo, -0.739\*Tweeter, +1.138\* Flicker and -0.203\* for Instagram.

When the independent variables are separately analyzes, however, it can be noted that students' exposure to Facebook predicts the painting creativity level of students [t=2.10, p<.05]. Other indicators of students' creativity do not have any significant relation to their on-line culture.

# **CONCLUSIONS**

In other related findings, it is noticeable that chatting on Facebook got the highest weighted mean [4.69]. Related findings state that learning is better due to existence of Facebook accounts among most of the e-Learners. Communication is more manageable considering that e-learners are not only located in the Philippines but also in other parts of the world. Apparently, these modes of delivery of lessons approve the idea of Saravan, 2007, as cited by Usman [2009], that e-Learning employs interactive technologies and communication system to improve the e-Learners' experience.

On the other hand, Simon, Woods and Griffin [2006] infer that when people in the organization are provided with guidance, and unified direction, it will be the source of their motivation to reach the organizational goal. Likewise, Watty [2003] suggests that the dimension of quality as perfection can be removed, since higher education does not aim to produce defect-free graduates

Therefore, visiting Face book account at least twice a day as online culture improves creativity, architectural drafting and designing skills of learners.

# **REFERENCES**

 Angelou, G. N., & Economides, A. A. E-learning investment risk management. Information Resources Management Journal, 2010 (4), 80-104. 2007. Retrieved from http://search.proquest.com/docview/215882668? accounted=33511

- 2. Askling, B. Institutional Responses in Sweden, in Westerheijden, d. et al. [eds.] Changing Contexts of Quality assessment. Recent trends in west European Higher Education, Trecht, Lemma. 1994.
- 3. Askling, B. Quality Monitoring as an Institutional Enterprise, Quality in Higher Education, vol. 3, no. 1 1997.
- 4. Bain, J. D., Ballantyne, R., Mills, C., and Lester, n. C. Reflecting on practice: student teachers' perspectives. Flaxton, qld: post pressed.2002.
- 5. Baugh, D. F. The school-based administrative internship: requirements and student expectations. *Connections*, 7-12.2003.
- Brennan J. Authority, Legitimacy and Change: the rise of quality assessment in higher education, Higher Education Management, Vol. 9, No. 1.1997.
- 7. Brennan, J. and Shah, T. Quality assessment and institutional change: Experiences from 14 countries, Higher Education, Vol. 40 .2000.
- 8. Cave, M. Kogan, M. and Smith, R. [Eds] Output and Performance Measurement in Government: the state of the art, London, Jessica Kingsley, Columbus, OH: Prentice Hall.1990.
- 9. Chiu, Patricia Denese BM PHL Internet slowest in ASEAN: report. GMA News. April 20,2014 1:48pm
- Cook, S. G. E-Learning requires teaching E-leadership online. Women in Higher Education. Retrieved May 17, 2011 from ProQuest Education Journals.2010.
- 11. Commission on Higher Education Bulletin on Asian Members, CHED profile. 2011-13
- 12. Davidson, P., & Griffin, R. Management: Tactical planning and operational planning.2006
- 13. Davidson, P., Simon, A., Woods, P., & Griffin, R. (2009). Management. QLD, Australia: John Wiley & Sons Australia, Ltd.
- 14. Davies, P.M. On school educational technology. Management in Education, 24 [55]. Retrieved on May 18, 2011 from SAGE Publications. 2010.
- 15. Dill, D. The Regulation of Academic Quality: An Assessment of University Evaluation Systems with Emphasis on the United States, Background paper, PPAQ The University of North Carolina at Chapel Hill www.unc.edu/ppaq .2003.
- 16. Eaton, J. S. Accreditation and Recognition of Qualifications in Higher Education: the United States, in Quality and Recognition in Higher Education, OECD .2004.
- 17. Ewell, P. T. A Delicate Balance: the role of evaluation in management, Quality in Higher Education, Vol. 8, No. 2.2002.

- 18. Harvey, L. The End of Quality?, Quality in Higher Education, Vol. 8, No. 1.,2002.
- 19. Harvey, L. and J. Newton Transforming Quality Evaluation, Quality in Higher Education, Vol. 10, No. 2, 2004.
- 20. Heng Keung Ma. Internet Addiction and Antisocial Internet Behavior of Adolescents. Scientific world Journal 2011:11:2187-2196. Published online Nov 3,2011.doi:10.1100/2011/308631 PMCID:PMC3217592
- 21. Horsburgh, M. Quality Monitoring in Higher Education: the impact on student learning, Quality in Higher Education, Vol. 5, No. 1,1999.
- 22. Gordon, K. Ten Skills for future leaders. Corn and Soybean Digest 69 [10], 35. Retrieved May 24, 2011, from ABI/INFORM Trade & Industry.doi: 1979816901.2009.
- 23. Groenewald, Thomas. 2014. A Phenomenological Research Design Illustrated. International Journal of Qualitative Methods. Retrieved on September 10, 2014 from http://uir.unisa.ac.za/handle/10500/2573
- 24. Internet World Stat .Copyright © 2001 2014, Miniwatts Marketing Group. Updated on May 22, 2014.
- 25. Jensen, P.A., and J.K. Robinson. Deming's quality principles applied to a large lecture course. *J. Engr. Education* 84, no.1:45-50. 1995.
- Jones, D.P. Strategic Budgeting: The Board's Role in Public Colleges and Universities, AGB Occasional Paper No. 28 Washington, DC: Association of Governing Boards of Universities and Colleges 1995.
- 27. Lubienski, Christopher A.& Sarah Theule Lubienski. The Public School Advantage: Why Public Schools Outperform Private Schools. 304 pages, University of Chicago Press, 2013. Retrieve December 9, 2013
- 28. Malig, Jojo. Why Philippine Internet speeds are low. ABS-CBN News.com. April 21,2014 1:25pm
- 29. Murphy, J., & M. Vriesenga . Research on preparation programs in educational administration: An analysis (monograph). Columbia, MO: University of Missouri-Columbia, University Council for Educational Administration. 2004
- 30. Murphy, J. The landscape of leadership preparation: Reframing the education of school administrators. Newbury Park, CA: Corwin Press. 1992.
- National Policy Board for Educational Administration. Recognizing and encouraging exemplary leadership in America's schools: A proposal to establish a system of advanced certification for administrators. Washington, DC. 2001
- 32. New South Wales Department of Education and Training . School map: Best practice statements 2001. Sydney: Author.
- 33. Newton, J. Feeding the Beast or Improving Quality?: academics' perceptions of quality assurance and quality monitoring, Quality in Higher Education, Vol. 6, No. 2 .2000.
- 34. RA 8293. Intellectual Property Code of the Philippines, http://www.ipophil.gov.ph
- 35. Newton, J. Views from below: academics coping with quality, Keynote presentation at the Sixth QHE Seminar in association with EAIR and SRHE, 26th May 2001, Birmingham, United Kingdom.2001.

36. Shah, T. Quality Management, Quality Assessment and the Decision-Making Process, The IMHE Project on Institutional Impact, in Brennan, J. de Vries, P. and Williams, R. [Eds.] Standards and Quality in Higher Education, Higher Education Policy Series 37, Jessica Kingsley 1997.

- 37. Smeby, J.C. and Stensaker, B. National quality assessment systems in the Nordic Countries: developing a balance between external and internal needs?, Higher Education Policy, Vol. 12, No. 1 1999,
- 38. Standards New Zealand Quality Management and Quality Assurance Vocabulary, Australian/New Zealand Standard AS/NZS ISO 8402.1994.
- 39. Stensaker, B. External Quality Auditing in Sweden: Are Departments Affected?, Higher Education Quarterly, Vol. 53, No. 4,1999.
- 40. Stensaker, B. Trance, Transparency and Transformation: the impact of external quality monitoring on higher education, Quality in Higher Education, Vol. 9, No. 2.2003.
- 41. Summers, D.C.S. TQM Education: Parallels between industry and education. *Proceedings of the 1995 Annual Meeting of the American Society for Engineering Education*. Washington, DC: ASEE.1995.
- 42. Usman, Ramilyn V. 2009. E-Learning and Institutions Performance of BEAM USAID assisted Schools in Mindanao. Ang Karugasik. Sultan Kudarat State University, Vol 8,No. 1.
- 43. Valisno, Mona D. (ed.) . The Reform and Development of Higher Education in the UNESCO Higher Education Policy Series No. 1. pp.1-33.2000.
- 44. Vroeijenstijn, A.I. Governments and university: opponents or allies in quality assurance?, Higher Education Review, London, Vol. 27, No. 3 1995b.
- 45. Wang, C. Technology Leadership among School Principals: A Technology- Coordinator's Perspective. Asian Social Science, 6(1), 51-54. Retrieved May 3, 2011, from ProQuest Asian Business and Reference. (Document ID: 2225506791).2010.
- 46. Watty, K. When will Academics Learn about Quality?, Quality in Higher Education, Vol. 9, No. 3,2003.
- 47. Woodhouse, D.Quality and Quality Assurance, Quality and Internationalisation in Higher Education, OECD-IMHE .1999.
- 48. <a href="http://www.liceo.edu.ph/index.php/news/80-liceo-u-passes-iquame-awarded-by-ched-with-category-a-t-status.html">http://www.liceo.edu.ph/index.php/news/80-liceo-u-passes-iquame-awarded-by-ched-with-category-a-t-status.html</a>, accessed November 9, 2012
- 49. http://www.positivenewsmedia.com/am2/publish/Education 20/CHED awards au..., accessed November 9, 2012
- 50. http://www.sunstar.com.ph/manila/ched-monitors-performance-152-nursing-s..., accessed November 9, 2012
- 51. <a href="http://www.gmanetwork.com/news/story/279358/news/nation/ched-no-such-thing-as-top-20-phl-schools-list">http://www.gmanetwork.com/news/story/279358/news/nation/ched-no-such-thing-as-top-20-phl-schools-list</a>, accessed November 9, 2012
- 52. http://www.oecd.org/edu/highereducationandadultlearning/39169515.pdf, accessed November 9, 2012